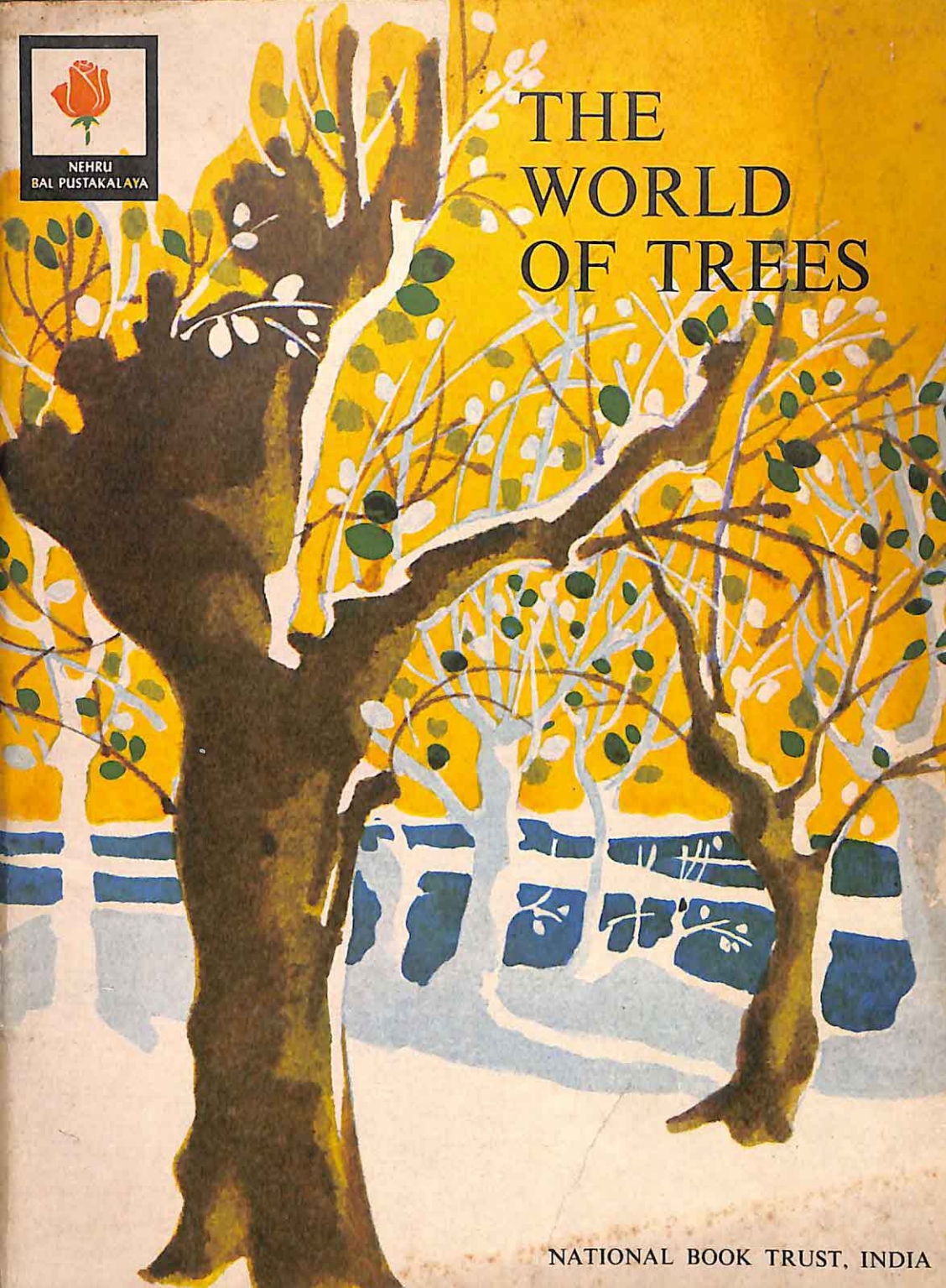




NEHRU
BAL PUSTAKALAYA

THE WORLD OF TREES



NATIONAL BOOK TRUST, INDIA



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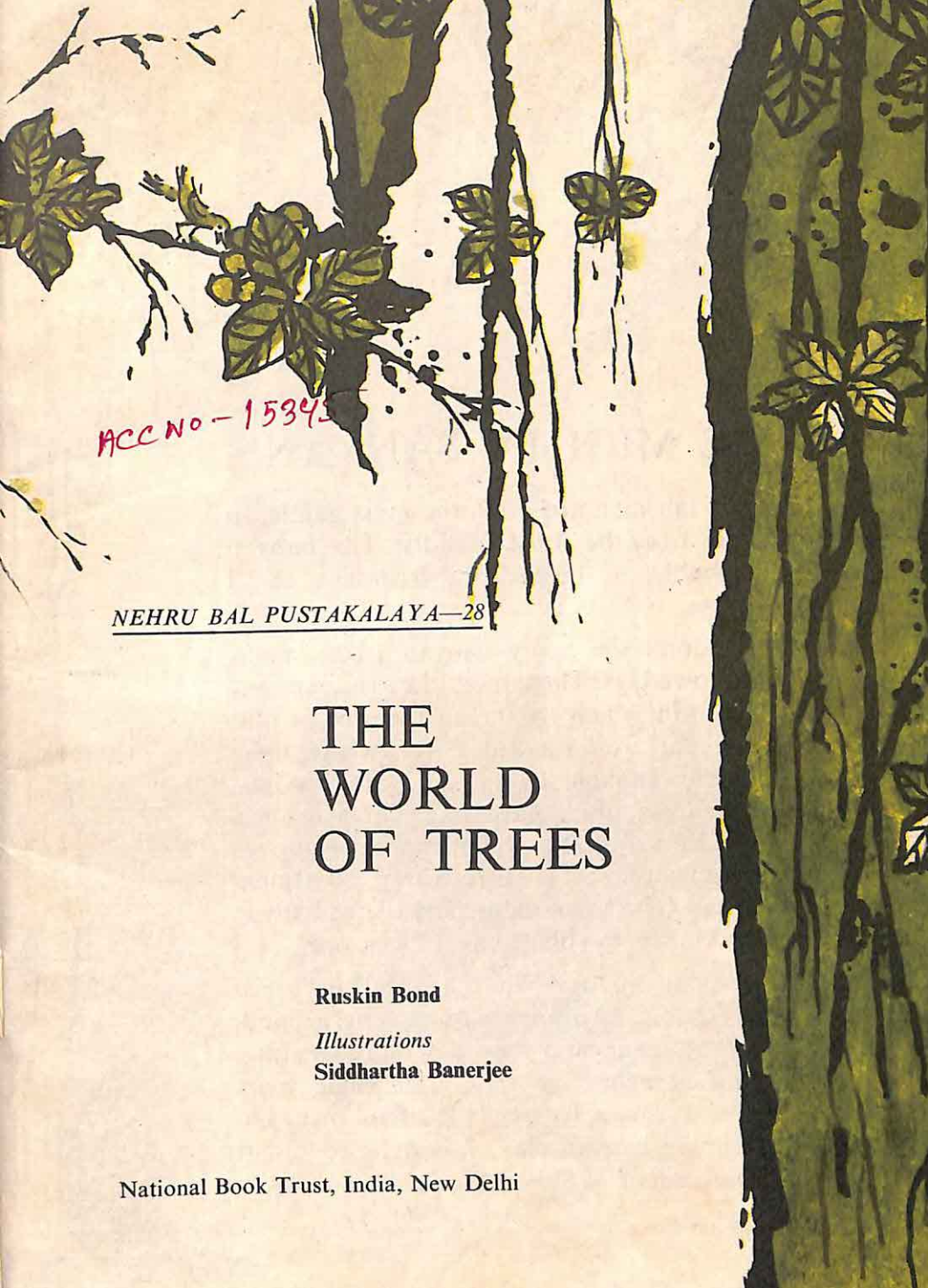
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NEHRU BAL PUSTAKALAYA—28

THE WORLD OF TREES

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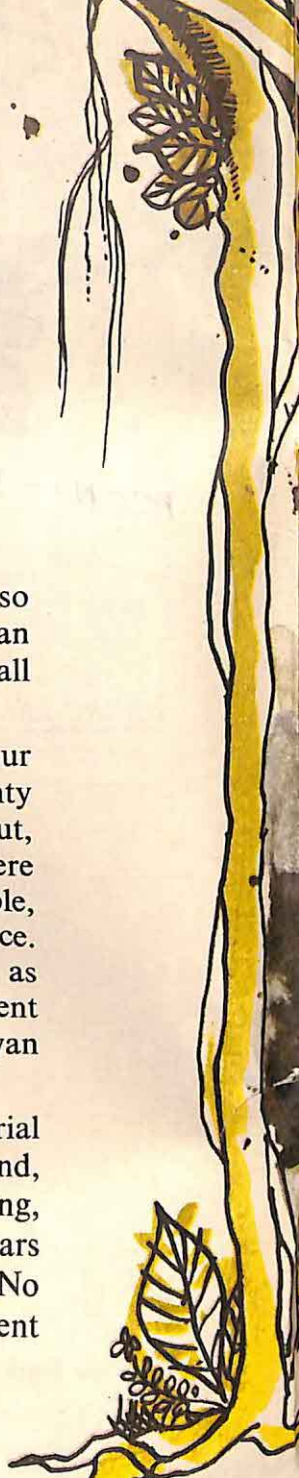


THE MIGHTY BANYAN

Just as tall men are often the most gentle, so are big trees the most friendly. The banyan is probably the biggest and friendliest of all our trees.

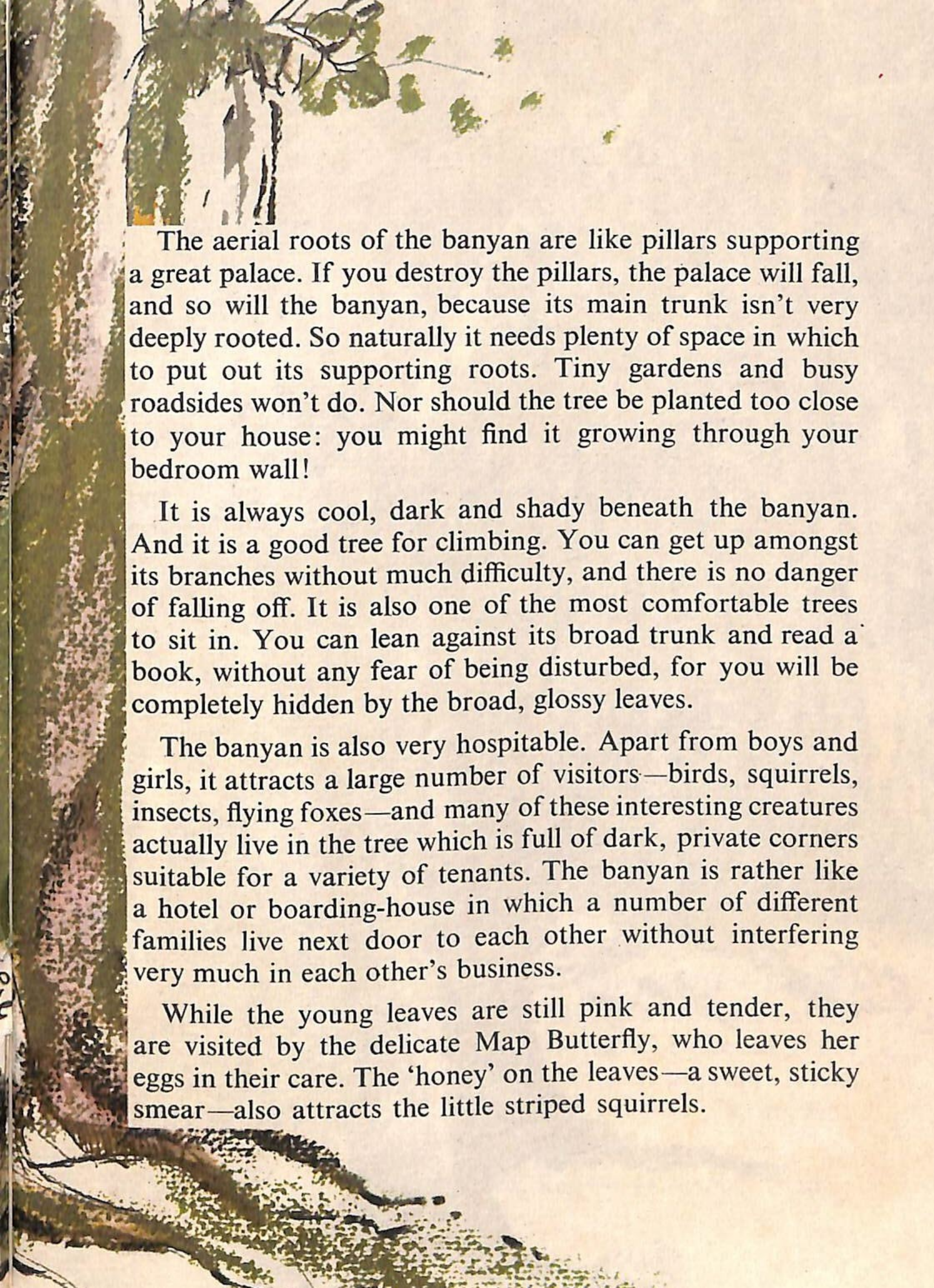
We don't see many banyan trees in our cities nowadays. These trees like to have plenty of space in which to spread themselves out, but in our overcrowded cities, where there is barely enough living space for people, banyan trees don't have much of a chance. After all, a full-grown banyan takes up as large an area as a three-storey apartment building! Of course, many parks have banyan trees. And every village has at least one.

The banyan has what are called 'aerial roots', that is, its branches drop to the ground, take root again, and send out more twisting, trailing branches, so that after some years the tree forms a forest-glade of its own. No wonder the banyan was chosen to represent the matted hair of Shiva!










The aerial roots of the banyan are like pillars supporting a great palace. If you destroy the pillars, the palace will fall, and so will the banyan, because its main trunk isn't very deeply rooted. So naturally it needs plenty of space in which to put out its supporting roots. Tiny gardens and busy roadsides won't do. Nor should the tree be planted too close to your house: you might find it growing through your bedroom wall!

It is always cool, dark and shady beneath the banyan. And it is a good tree for climbing. You can get up amongst its branches without much difficulty, and there is no danger of falling off. It is also one of the most comfortable trees to sit in. You can lean against its broad trunk and read a book, without any fear of being disturbed, for you will be completely hidden by the broad, glossy leaves.

The banyan is also very hospitable. Apart from boys and girls, it attracts a large number of visitors—birds, squirrels, insects, flying foxes—and many of these interesting creatures actually live in the tree which is full of dark, private corners suitable for a variety of tenants. The banyan is rather like a hotel or boarding-house in which a number of different families live next door to each other without interfering very much in each other's business.

While the young leaves are still pink and tender, they are visited by the delicate Map Butterfly, who leaves her eggs in their care. The 'honey' on the leaves—a sweet, sticky smear—also attracts the little striped squirrels.






On summer nights the banyan tree is visited by the Hawk-Cuckoo, whose shrill, nagging call may sometimes have kept you awake. The Maharashtrians call the bird *Paos-ala*, which means 'rain is coming!' But an Englishman who couldn't sleep claimed that when the bird gave its full-throated cry it seemed to be shouting: "Oh dear, oh dear! How very hot it's getting! We feel it . . . we feel it . . . WE FEEL IT!" And he named it the Brain Fever Bird.

The banyan tree really comes to life during the monsoon when the branches are thick with scarlet figs. You won't enjoy eating the berries (which are often full of insects), but the many birds that gather in the tree—cheerful bulbuls and coppersmiths, quarrelsome mynas, noisy crows—feast on the fruit. And when night falls and the birds are resting, dark flying foxes flap heavily about the tree, chewing and munching loudly as they clamber over the branches.

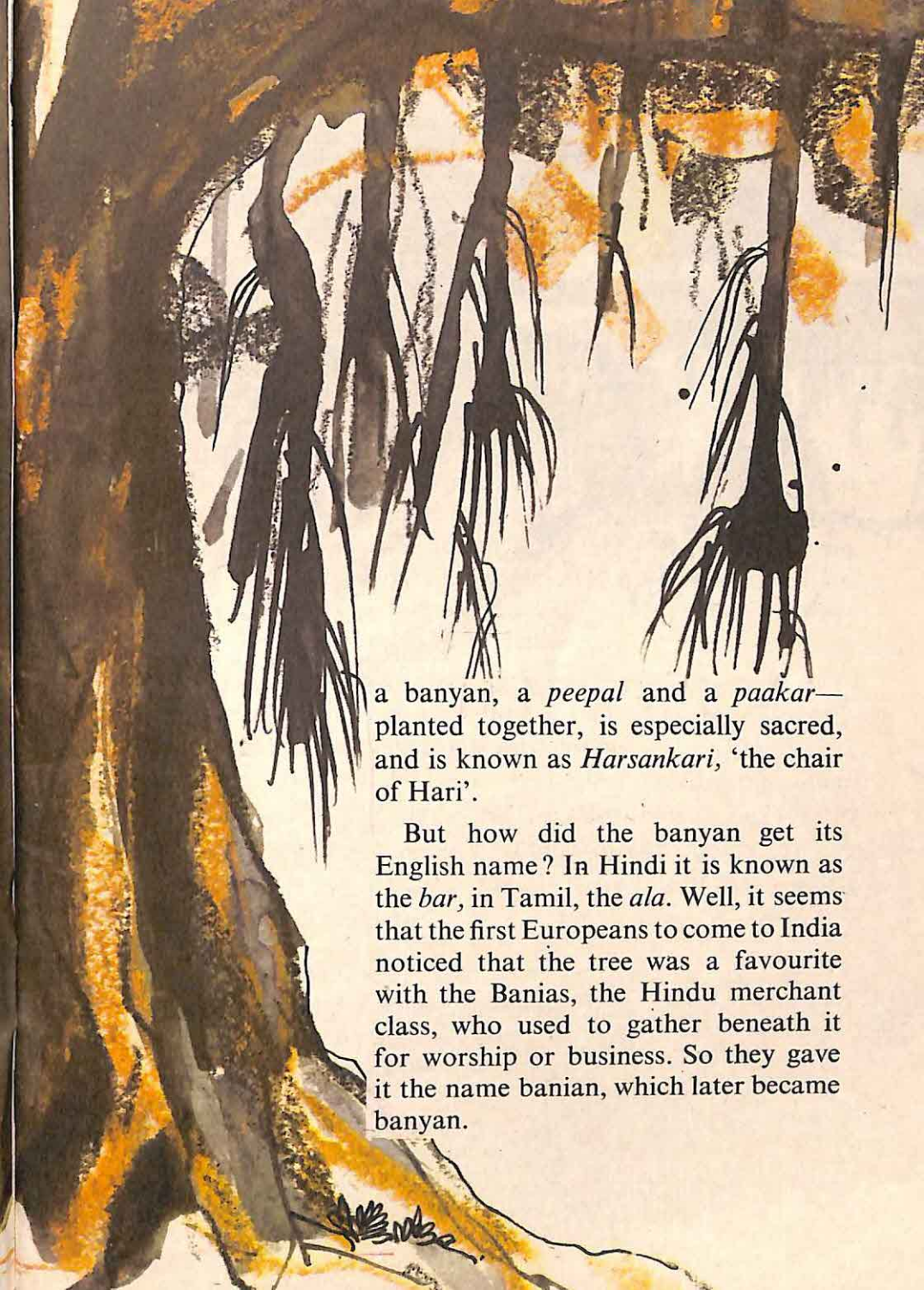
The banyan belongs to the Fig family, and in India all the figs—the best known of which is the *peepal*—are held sacred. The *Akshaya Vata*, the 'undying' banyan tree at the sacred confluence of the rivers at Allahabad, is the subject of many legends, and still attracts millions of pilgrims. It was first described by Hiuen Tsang, the Chinese pilgrim, who visited India over a thousand years ago.

A group of three sacred trees, known as *tentar*, 'triad'—





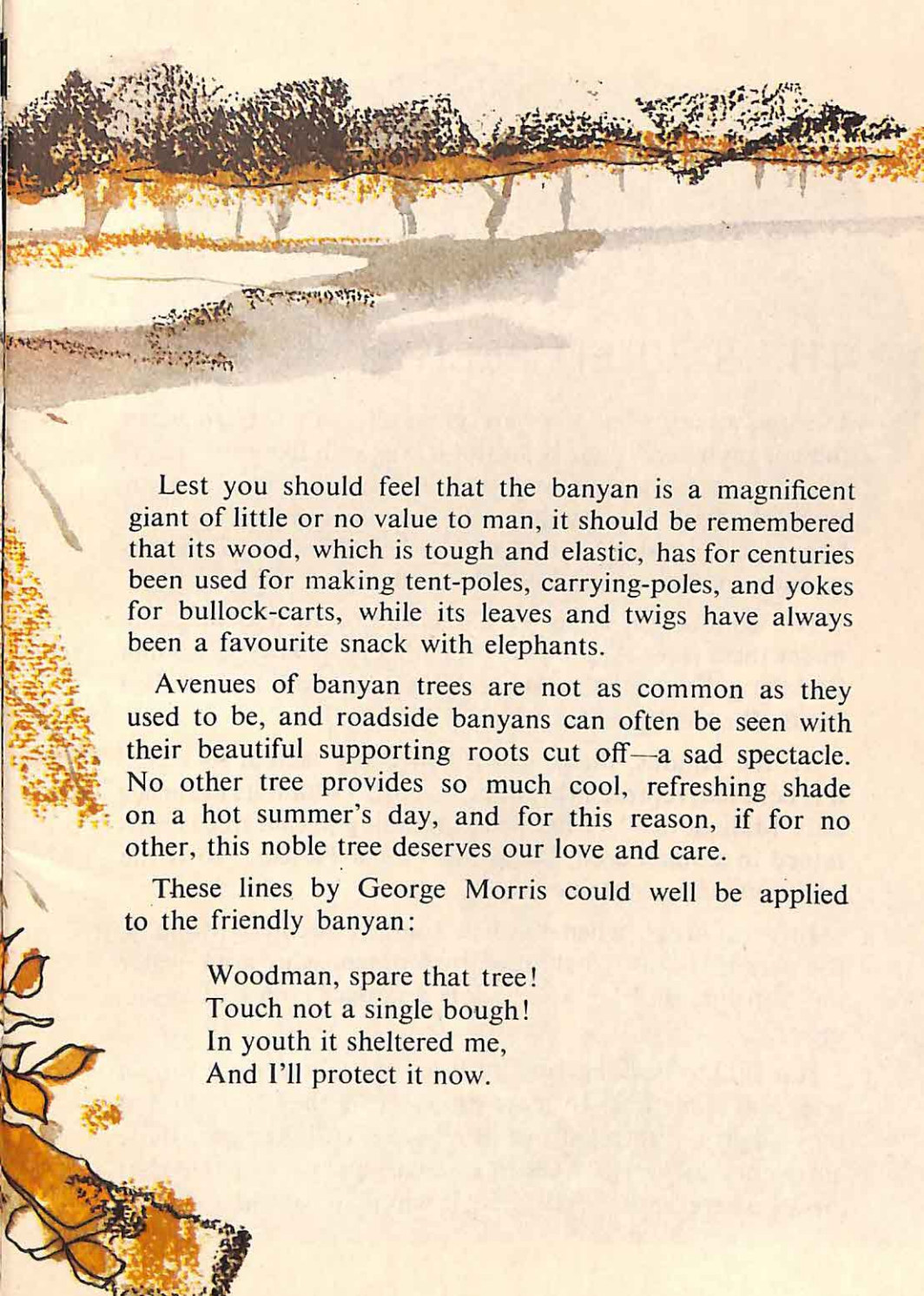
Namh.



a banyan, a *peepal* and a *paakar*—
planted together, is especially sacred,
and is known as *Harsankari*, ‘the chair
of Hari’.

But how did the banyan get its
English name? In Hindi it is known as
the *bar*, in Tamil, the *ala*. Well, it seems
that the first Europeans to come to India
noticed that the tree was a favourite
with the Banias, the Hindu merchant
class, who used to gather beneath it
for worship or business. So they gave
it the name banian, which later became
banyan.





Lest you should feel that the banyan is a magnificent giant of little or no value to man, it should be remembered that its wood, which is tough and elastic, has for centuries been used for making tent-poles, carrying-poles, and yokes for bullock-carts, while its leaves and twigs have always been a favourite snack with elephants.

Avenues of banyan trees are not as common as they used to be, and roadside banyans can often be seen with their beautiful supporting roots cut off—a sad spectacle. No other tree provides so much cool, refreshing shade on a hot summer's day, and for this reason, if for no other, this noble tree deserves our love and care.

These lines by George Morris could well be applied to the friendly banyan:

Woodman, spare that tree!
Touch not a single bough!
In youth it sheltered me,
And I'll protect it now.

THE SACRED PEEPAL

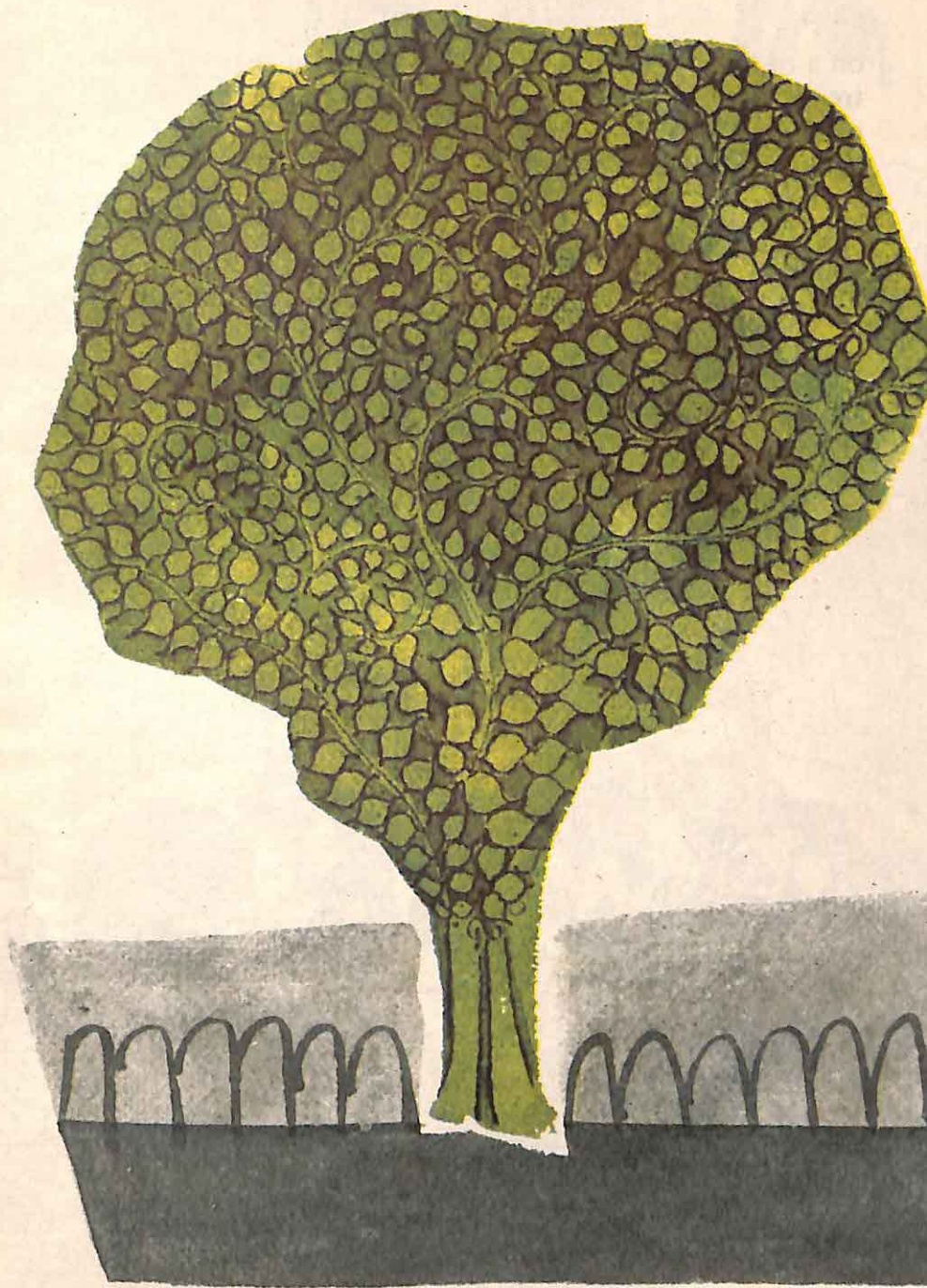
In some ways *peepal* trees are great show-offs. Even when there is no breeze, their beautiful leaves spin like tops, determined to attract your attention and invite you into their shade. And not only do they send down currents of cool air, but their long slender tips are also constantly striking together to make a sound like the pattering of raindrops.

No wonder the rishis of old chose to sit and meditate under these trees. And it was beneath a *peepal* that Gautama Buddha gained enlightenment. This tree came to be called the Bodhi, the 'tree of wisdom'.

To the Hindus, the *peepal* is especially sacred. Its roots, it is believed, represent Brahma, its bark Vishnu, its branches Shiv Mahadeva. "As the wide-spreading *peepal* tree is contained in a small seed," says the *Vishnu Purana*, "so is the whole universe contained in Brahma."

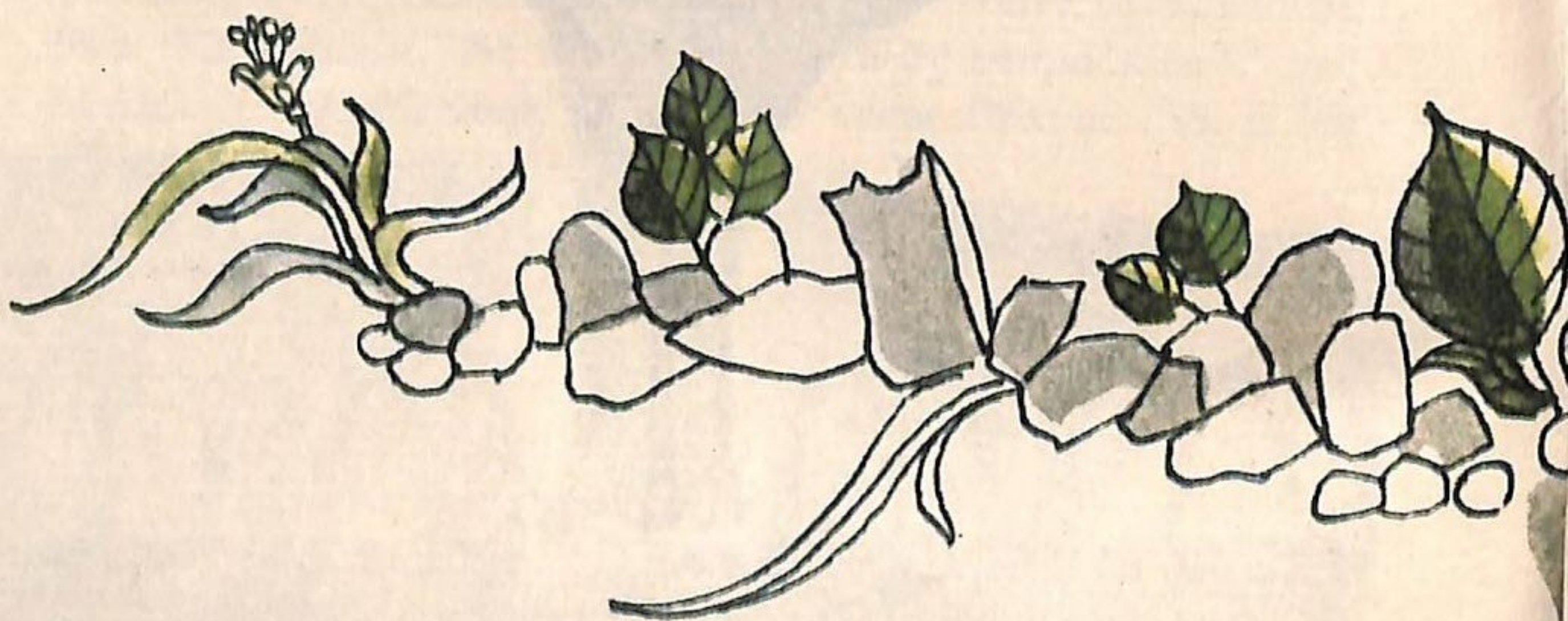
In rural areas, when the new moon falls on a Monday, the *peepal* is still worshipped by women, who pour water on its trunk, and lay at its roots a copper coin and sweet-meats.

It is said to be dangerous to lie or cheat beneath a *peepal* tree, and sometimes to tease shopkeepers they are told that they ought not to plant one in a bazaar. All the same, there are plenty of *peepal* trees in our bazaars. It is a tree that grows wherever its seed falls; it will take root in a wall or



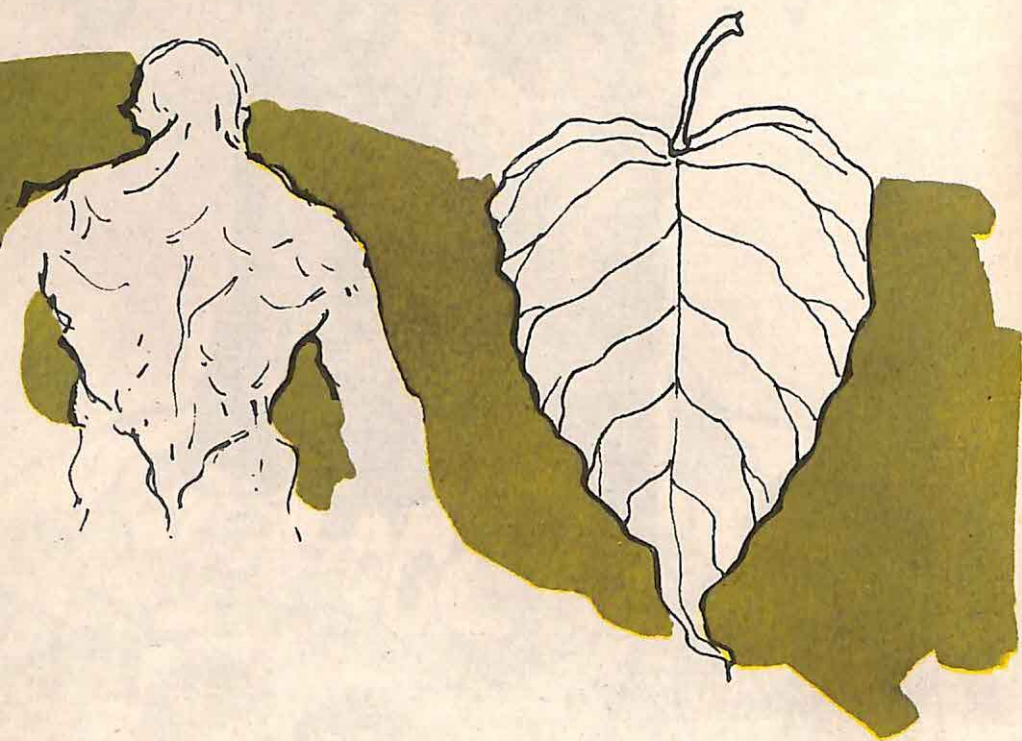
on a roof-top—or even in the fork of another tree if given the chance. As its roots are quite capable of pushing through bricks and mortar, it is best to plant it some distance away from buildings.

No other tree has a leaf which tapers to such a perfect point as the *peepal*. When it rains, you can see the water drip from the points. Water runs off more easily from a point than from a blunt end, and the sooner a leaf dries the better it is for the tree.





The leaf is beautiful, and has been likened to the perfect male physique. From the stalk (the human neck) the edges of the leaf run squarely out on either side (the shoulders) and then curve round and inwards to end in a finely-pointed tail (the waist), so that the suggestion is of a square, broad torso upon a narrow waist—a body such as we see in pictures of Krishna.



While the chief occupants of the banyan are various birds and insects, the *peepal* is said to be the residence of a wide variety of ghosts and mischievous spirits. The most

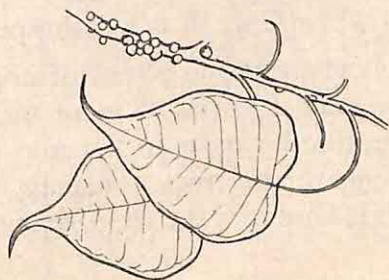
mischievous of these is the Munjia. He lives in lonely *peepal* trees, and rushes out at tongas, bullock-carts and buses, trying his best to upset them! Our grandmothers still advise us not to yawn when passing under a *peepal* tree. Should you yawn, it is best to cover your mouth with your hand, or snap your fingers in front of it. "Otherwise," says Grandmother, "the Munjia will rush down your throat and completely ruin your digestion!"

Peepal trees have very long lives. There are some ancient *peepals* in Hardwar which are even older than the present town, probably as old as the eleventh century Mayadevi Temple. A *peepal* tree taken from India to Sri Lanka in 288 B.C. is still alive and flourishing. Records of its growth were carefully preserved over the centuries, and it must now be 2257 years old.

To fell a *peepal* tree was once looked upon as a great sin. On the other hand, anyone who planted a *peepal* was said to receive the blessings of generations to come.

Let us also earn the blessings of future generations by planting not only more *peepal* trees—which are quite capable of looking after themselves—but all kinds of trees for shade and shelter, fruit and flower, beauty and utility.

Can you imagine a country without any trees, a country that has become one vast desert? Well, that is what could easily happen here if we keep cutting our trees and forests without bothering to grow others in their place.



THE MANGO GROVE

No one in his right mind would want to chop down a mango tree. Every mango tree, even if it grows wild, is generous with its juicy fruit, known sometimes as 'the nectar of the gods', and sometimes as the 'king of fruits'. You can eat ripe mangoes fresh from the tree; you can eat them in pickles or chutneys or jams; you can eat them flattened out and dried, as in *aam-papar*; you can drink the juice with milk as in 'mango-fool'; you can even pound the kernel into flour and use it as a substitute for wheat. And there are over a hundred different varieties of the mango, each with its own distinctive flavour.

But in praising the fruit, let us not forget the tree, for it is one of the stateliest trees in India, its tall, spreading branches a familiar sight throughout the country, from the lower slopes of the Himalayas to Cape Comorin.

In Gujarat, on the night of the seventh of the month of *Savan* (July-August), a young mango tree is planted near the house and worshipped by the womenfolk to protect their children from disease. Sometimes a post of mango wood is set up when Ganesh is worshipped.

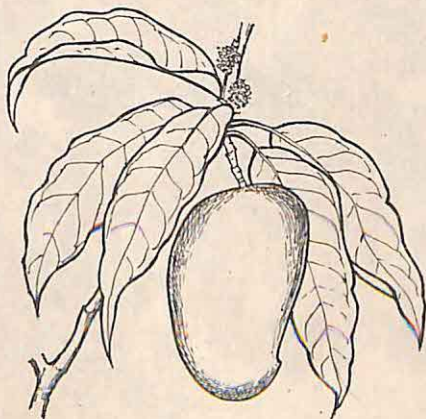
If you live anywhere in the plains of northern India, you will often have seen a grove of giant mango trees, sometimes appearing like an oasis in the midst of the vast, flat countryside. Beneath the trees you may find a well and a small temple. It is here that the tired, dusty farmer sits down

to rest and eat his mid-day *chapati*, following it with a draught of cold water from the well. If you join him and ask him who planted the mango grove, he will not be able to tell you; it was there when he was a boy, and quite probably when his father was a boy too. Some mango groves are very, very old.

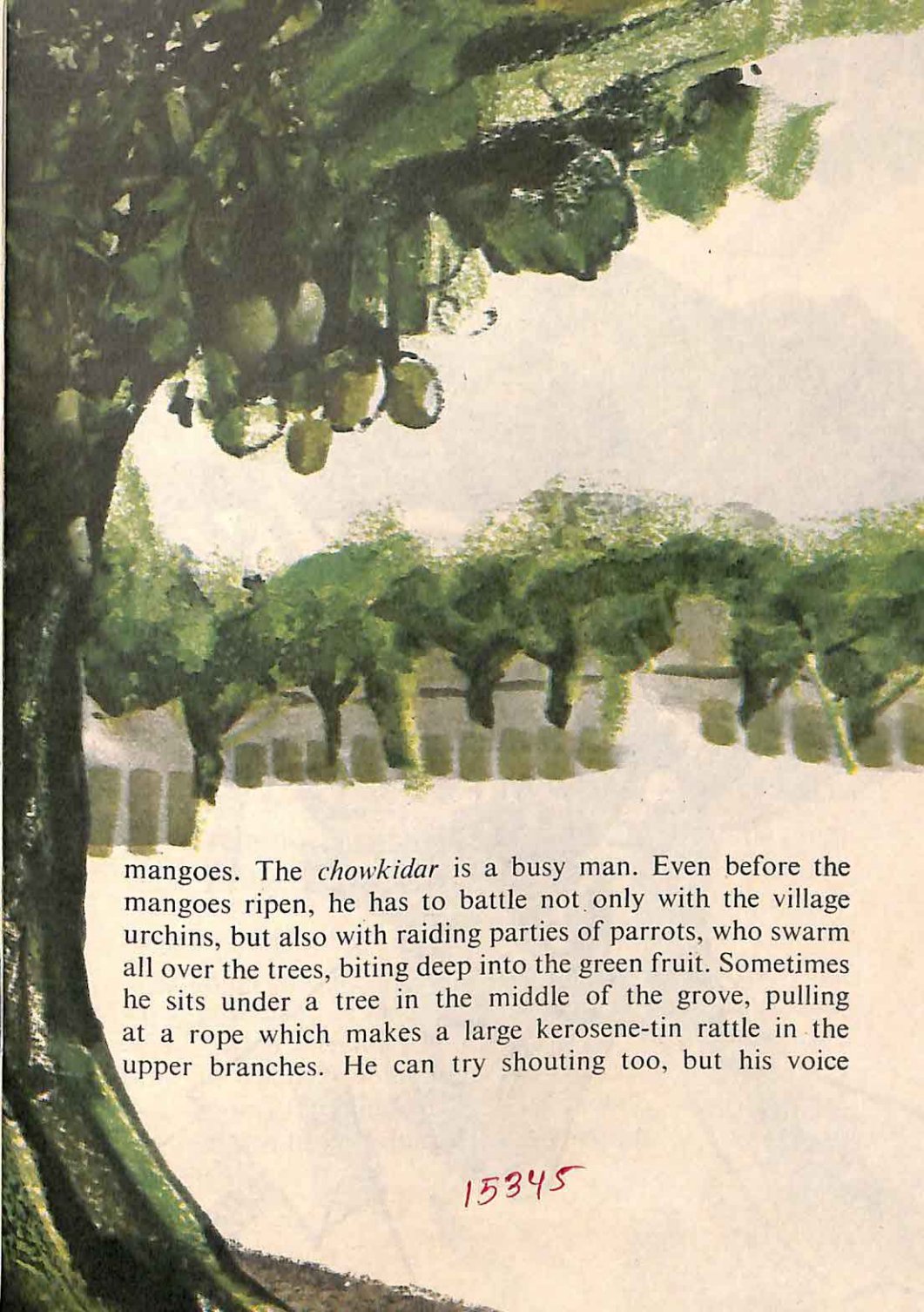
Have you heard of the Garden of a Thousand Trees? Probably not. But you must have heard of the town of Hazaribagh in Bihar. Well, a huge mango grove containing over a thousand trees—some of which are still there—was known as Hazari, and around these trees a village grew, spreading in time into the modern town of Hazaribagh, ‘Garden of a Thousand Trees’.

Anyway, that’s the story you will hear from the oldest inhabitants of the town. And even today the town is almost hidden in a garden of trees: mango and *neem*, *sal* and tamarind.

All are welcome in a mango grove. But during the mango season, when the trees are in fruit, you enter the grove at your own peril! At this time of the year it is watched over by a fierce *chowkidar*, whose business it is to drive away any mischievous children who creep into the grove in the hope of catching him asleep and making off with a few juicy







mangoes. The *chowkidar* is a busy man. Even before the mangoes ripen, he has to battle not only with the village urchins, but also with raiding parties of parrots, who swarm all over the trees, biting deep into the green fruit. Sometimes he sits under a tree in the middle of the grove, pulling at a rope which makes a large kerosene-tin rattle in the upper branches. He can try shouting too, but his voice

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can't compete with the screams of the emerald-green parrots. They wheel in circles round the grove and, spreading their tails, settle on the top-most branches.

Even when there are no mangoes, you will find parrots in the grove, because during their breeding season, their favourite nesting-places are the holes in the gnarled trunks of old mango trees.

Other birds, including the blue jay and the little green coppersmith, favour the mango grove for the same reason. And sometimes you may spot a small owl peering at you from its hole half-way up the trunk of an old tree.


Although the mango is chiefly valued for its fruit, the wood is sometimes made into planks and used for packing-cases. Cheap furniture, doors and windows are also made from the wood. In some parts of India, the mango tree acts as a support for different kinds of orchids, which garland the tree with flowers during the hot season.

A FEAST IN THE SEMAL TREE


Most of you, even if you do not play badminton, are familiar with a shuttlecock. Well, if you take a shuttlecock and paint it a bright crimson or red, you will get a fair idea of what the flower of the *semal* (or silk-cotton tree) looks like.

Now just imagine a tall, leafless tree covered with masses of crimson flowers, and you will know what this wonderful tree looks like in spring. There are few trees in the world that can compare with it in beauty and brilliance.





You may, of course, have seen a *semal* tree either in the jungle or along a tree-lined avenue in one of our cities. It is a good shade tree, losing its leaves for only a brief period, just before it flowers. During the summer months you will find its seeds covered with white cotton, which is blown far and wide by the slightest breeze. This cotton is not suitable for spinning and weaving into cloth, but it is used for stuffing pillows and cushions.



Like most trees, the *semal* has its place in our folklore. Whenever the Murias, a forest tribe in Madhya Pradesh, found a village, almost their first act is to plant a *semal* tree in the centre of the site. There are others who use its wood to make the posts around which couples walk at the marriage ceremony. Images of parrots fashioned from the wood of the *semal* are also hung in the marriage sheds, for the parrot represents the spirit of the forest.

Semal wood is very soft, and is sometimes used for making toys. Fishermen also use it to make floats for their nets. The seeds are valued as a nourishing food for cattle, while the gum from the bark is used in medicines by Ayurvedic doctors.

The *semal* is as remarkable for the colour and profusion of its flowers as for the large number of birds that visit it when it is in flower. Some birds come for the nectar which is found in the big, great, red flowers; some come in search of the thousands of drowned insects which lie at the bottom of the flower-cups; some come because the soft wood of the tree is easily hollowed out for a nesting-site. Whatever the reason, from morning till night the tree is full of visitors.

Among those who visit the *semal* are a large number of crows, come to have a few sips of the nectar before setting out on the day's mischief. There are mynas of various kinds, squabbling for the best seats. Barbets and bulbuls, king crows and koels, all join in the feasting. In addition to the birds, palm squirrels dart about from place to place, tossing their fluffy tails from side to side, and chattering noisily as they jostle each other on the branches. And all the time flowers are being constantly broken off, falling to the ground with soft thuds.

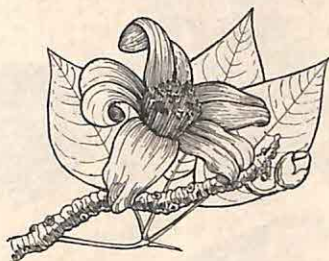
The Rosy Pastors or rose-coloured starlings are probably the most noticeable visitors to the *semal* tree. They come in flocks, not singly; their colour vies with that of the flowers; and they make such a racket that one thinks that a terrible riot is going on. But the pastors are not fighting, they are simply enjoying themselves.

Another inhabitant of the *semal* tree is the Big Indian Bee. This bee lives in huge nests, or combs, which are usually attached to the branches of the *semal* tree. The straight, horizontal branches of the *semal* are just right for support-

ing the huge combs, which can be as much as five feet in length and two and a half feet in width. The residents of the comb are of three kinds—the males or drones who do no work, the females who lay the eggs, and the workers who build the giant combs. These are permanent colonies, filled with honey or wax or pollen.

The sting of the Big Bee is painful and poisonous, especially in the hot weather; but jungle tribes, such as the Kols and the Santals, have developed an immunity to the poison. They don't mind being stung. But strangers to the forests have been badly stung, and it is wise not to disturb these bees, for they will attack both man and beast with great ferocity.

There is the story of two shikaris who were resting between beats one hot May morning in a central Indian jungle. Overhead spread the crown of a tall *semal* tree with a dozen great combs of the Big Bee hanging from the branches. One of the shikaris unwisely lit a pipe. Up went the pipe-smoke, and down came the bees! They were soon buzzing around the two shikaris, who beat an undignified retreat, running for over a mile across open country until they reached the safety of a river. They were so badly stung that they had to remain in the river for hours, up to their chins in water.

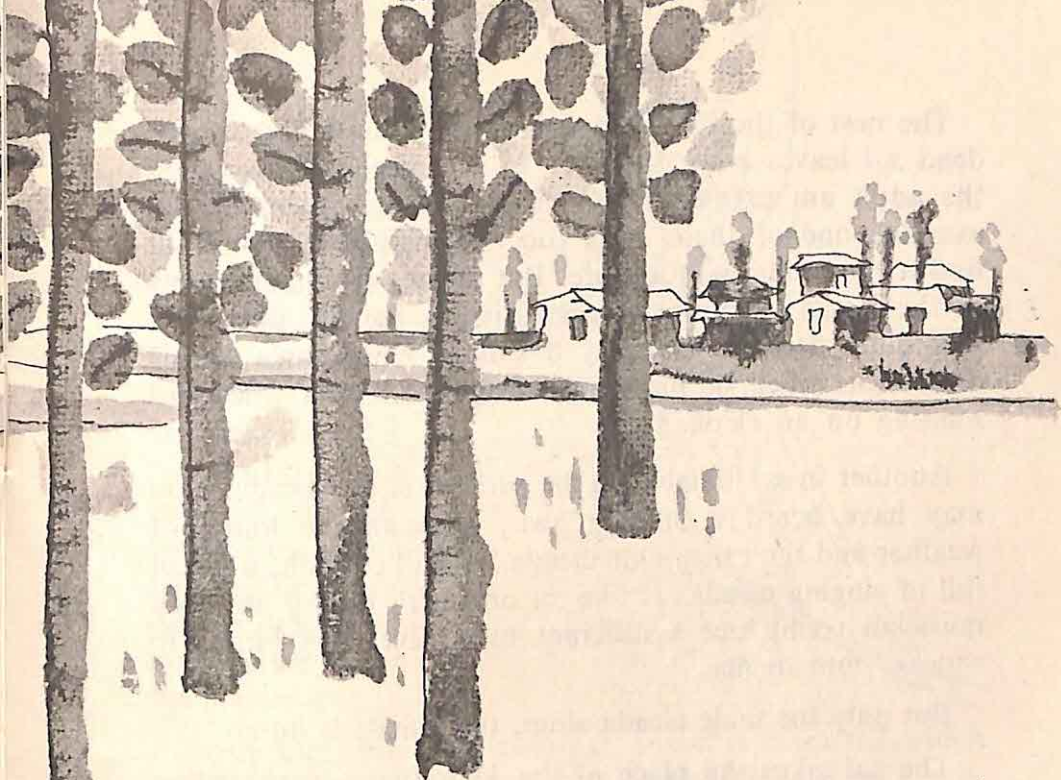


DEEP IN THE FOREST

No tree-lover, even if he or she is a city-dweller, can ignore the *sal* and the *mahua*, two of the most splendid and most valuable of our forest trees.

The *sal* can be grown in a city, but it does not like being alone; it is much happier when growing amongst its own kind in the forests that cover the moist foothills and plateau lands





of northern and central India. It is a valuable timber tree, and in northern India most of the wood used in buildings comes from the *sal*; but it is not only the wood that is useful. When tapped, the *sal* yields a large quantity of resin, which is burnt as incense in certain Hindu religious ceremonies. The resin is also used to caulk boats and ships. The large, shiny leaf is sometimes put to good use too. The Santals of Bihar gather fresh *sal* leaves daily, and use them as plates or as drinking-cups. When fitted cleverly into one another, the leaves make excellent plates for holding *dal* and rice, while one large *sal* leaf, twisted round to form a hollow, will hold water quite effectively.

The leaf is used for building too—not by men, but by ants!

The nest of the Red Ant consists of a mass of green or dead *sal* leaves stuck together with a sort of gum which the adult ant extracts from the young ant-grubs. If you examine one of these nests (do not disturb it!) you will find it humming with ant-life. But do not try making pets of these ants; they are as aggressive as the Big Bees, and bite quite fiercely, as many a shikari has known to his discomfort when he has brushed against a nest when out hunting on an elephant.

Another insect inhabiting the *sal* tree is the cicada. You may have heard it singing away through the long hot weather and the rains. One cicada is shrill enough; a forest full of singing cicadas is like an orchestra tuning up, each musician trying out a different tune. Even the birds are shocked into silence.

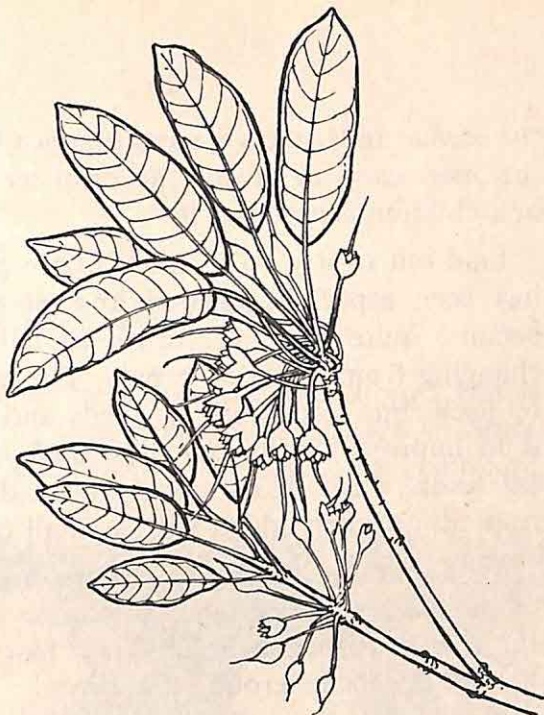
But only the male cicada sings, the female is dumb.

The *sal* takes the place of the *peepal* among the tribes of central India, and when the tree blossoms in March a festival called the *Bahbonga* is held. During marriages, two poles, one of bamboo, the other of *sal* wood, are set up in the marriage-shed, and these are anointed with oil and *haldi* (turmeric). If one of the couple is unwilling to go through with the marriage, he or she may take a leaf of the *sal* and tear it in two.

There is a tradition that at the time of the Buddha's birth, his mother stretched out her hand to hold a branch of a *sal* tree, and was delivered of her child. *Sal* trees are also said to have rendered homage to the Buddha at his death by letting their flowers fall on him out of season, and bending their branches to shade him.

The beautiful *mahua* is another forest tree that plays an important part in the lives of tribal people.

The flowers of the *mahua* can be eaten, raw or cooked, and are an important item of the food of the Gonds and other tribes in central and western India, particularly in time of drought when rice is scarce. In fact, the poorer people depend almost entirely upon the *mahua* crop.



From the seeds of the *mahua*, an oil is extracted which can be used for lighting as well as for cooking (as a substitute for *ghee*). Oil from the seeds is also used in the manufacture of soap.

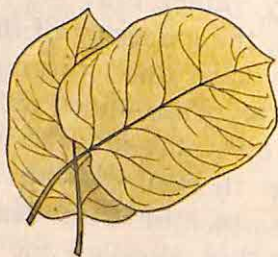
The *mahua* tree bursts into full bloom at the very beginning of the hot weather, when the fortunes of the tribal people are usually rather low. As it is the slack season among cultivators, the gathering of the *mahua* is a welcome task, the whole village often turning out to bring in the crop. Sometimes the grass under the *mahua* tree is burnt away so that the blossoms may be gathered more easily. The women equip themselves with baskets, piling them one on top of the other on their heads, and the children carry brooms so that after all the blossoms have been gathered the ground can be cleared in readiness for the next fall.

During the short period—only about fifteen days—that

the *mahua* falls, the villagers practically live in the jungle, the men carrying away the crop as fast as the women and children can collect it.

Laid out to dry on a smooth bare patch of ground that has been especially cleared and prepared, the blossoms become quite dry and shrink to half their normal size, changing from white to brown. The *mahua* is often eaten by itself, but sometimes *sal* seeds and rice are mixed with it to improve the flavour. The *mahua* is first boiled; the *sal* seeds, which have already been dried in the sun and roasted, are then added with a small quantity of rice.

Wild animals, particularly bears, are fond of the flowers of the *mahua*, but no one, human or animal, has to climb the tree to gather them. The tree blooms at night, and the flowers fall to the ground at dawn.



TALL WAVING PALMS

The next time you are taking an evening walk along a beach washed by the foaming waters of the Indian Ocean, look up and you will see what appear to be giant spiders climbing





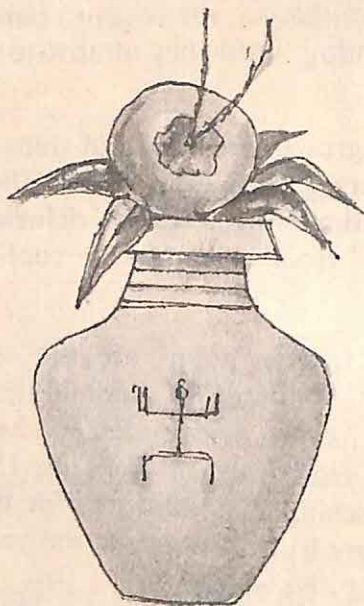
against the darkening sky. These are the tops of tall, slender palm trees, forever in motion, waving their tufts even when the air appears to be still. And when there is a storm, or a strong wind coming in from the sea, the coconut palms toss their heads in torment, bending until they almost touch the ground.

Most palms, when fully grown, are beautiful trees —“like arrows shot down from heaven” was how an early botanist described them. But sometimes the trees are deformed by people who cut away the fronds for use as roof-thatch or fuel.

The four best known Indian palms are the coconut (*nariyal*), the palmyra (*tal*), the date (*khajur*) and the betel-nut (*supari*). Each tree has its own peculiar beauty, and they are all valuable for their fruit, sap, or fibre. In 1583, an English traveller in India, seeing a coconut tree for the first time, wrote home: “It bears fruit throughout the year, not dates, but rather nuts like a man’s head.”

The coconut has been known to Indians from the earliest times, and mention is made of it in the *Puranas* and other old books. Arab sailors and merchants called it the ‘Indian nut’, a name that was also used by Marco Polo when he visited the Malabar coast in the thirteenth century. No one really knows where the first coconut grew—there have been many theories about its origin — but, of course, men have carried it far and wide. In olden times, the people of Tamil Nadu were active seafarers and they, together with the mariners of Bengal, were probably responsible for distributing the coconut over a wide area of South-East Asia.

The Coconut Festival, or *Nariyal Purnima*, is held at the end of the monsoon, when thousands visit the shore to offer coconuts to the sea. Fishermen put out in their small



boats and, in thanks-giving, pour milk, flowers and coconuts into the sea. Where worship is offered to Varuna, the Vedic god of the heavens and the oceans, the god is represented by a pot of water with a coconut placed over its mouth.

Few trees have as many uses as the coconut. Brooms are made from the leaf-ribs, palm-wine or toddy is made from the fermented sap; so is sugar or jaggery. Fibre is obtained from the outer cover

of the nut. The milk, or water, makes a refreshing drink. Copra is obtained from the dry fleshy kernel, and the oil extracted from the dry copra is sold as coconut oil or coconut butter. The coconut flesh is in itself a tasty and nourishing food.

The coconut is probably our most popular palm tree, but there are others equally important. Take the palmyra palm, for instance. In the days before paper was made, the fan-like palmyra leaves were used to write on. Most of the sacred Hindu and Buddhist scriptures were first written on palmyra leaves.



The palmyra palm is no less useful than the coconut. Its stems are used for roof-beams, its leaves for thatching cottages. The unfermented sap, called *neera*, makes a refreshing drink.

Everyone is familiar with the *supari* or betel-nut. Few know that it grows on a very slender, very tall palm tree,



which is cultivated along our coastal belt. If you live anywhere near a betel-nut grove, you are sure to have seen supple young men climbing swiftly up the smooth, perpendicular trunks of these palms. The trees grow quite close together; so when a man has gathered betel-nuts from one palm, he has only to lean across to climb into the next. This is an easier task than shinning up and down every coconut tree in order to knock down the fruit.

The betel is a delicate palm and needs careful cultivation.

The Indian date palm has the stoniest of dates, but it makes a decorative tree in a garden, where it can be seen raising its richly plumed head above the surrounding trees and shrubs. At certain times of the year it produces bunches of golden fruit, which glow in the sunlight. But this is a



feast provided only for birds; the fruit is too sharp and sour for our palates. The sap from the date palm can, however, be made into sugar.

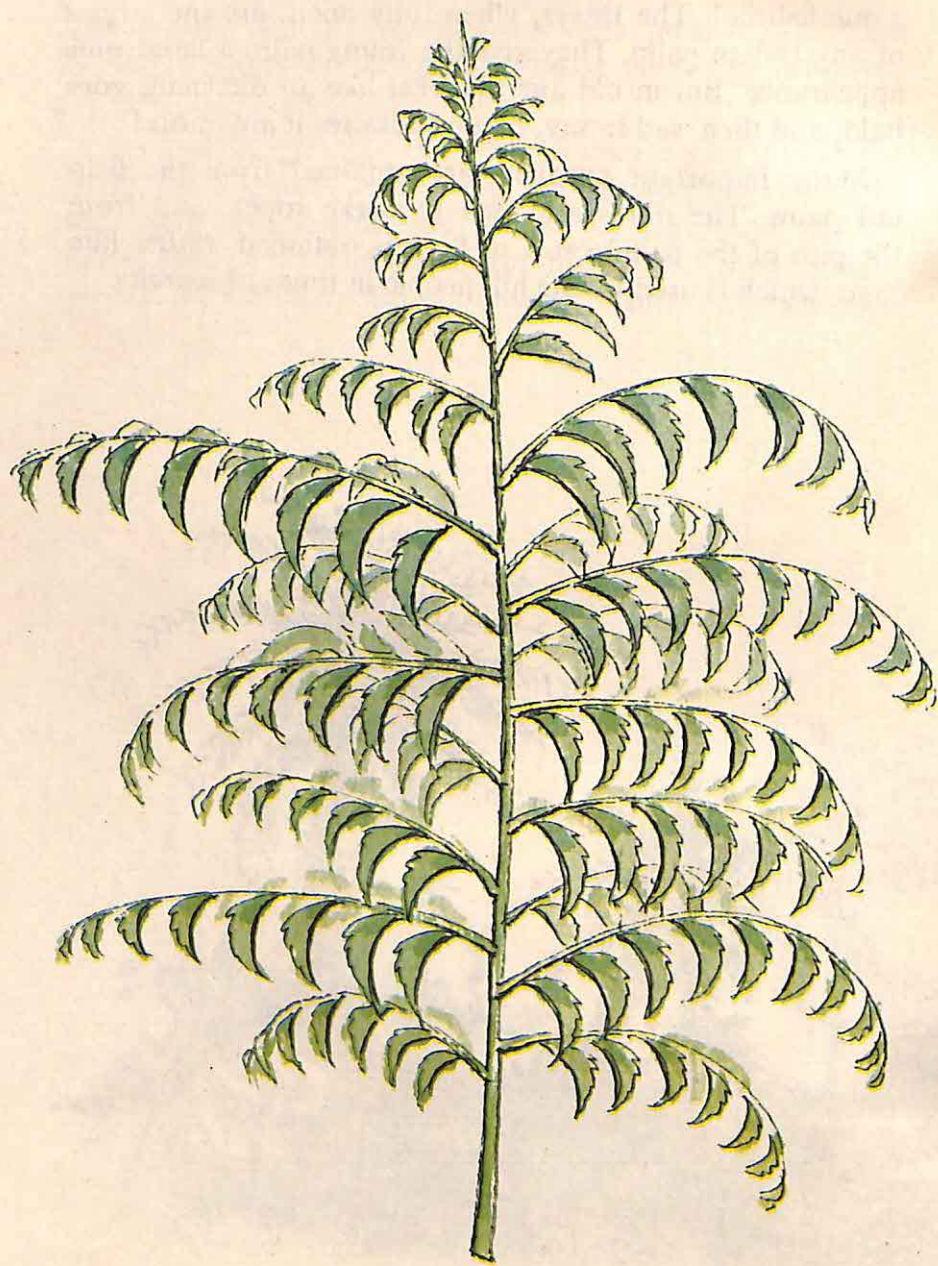
We usually think of palm trees as growing only near the coast, but the date palm springs up in wild places throughout the country, while the fish-tail or sago palm can be found even in the Himalayan foothills. The strong, wedge-shaped leaflets of the fish-tail look like fishes' fins, hence the



name fish-tail. The leaves, when fully open, are the largest of any Indian palm. They give the young palm a handsome appearance. But in old age the tree, like an old man, goes bald, and then, sad to say, no one admires it any more!

Many important products are obtained from the fish-tail palm. The fibres are used to make ropes, and from the pith of the palm a sort of flour is obtained, rather like sago, which is used by the hill people in times of scarcity.





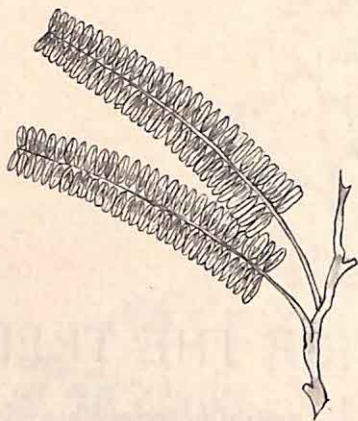
GREAT SPIRITS OF THE TREES

No account of the trees of India would be complete without a mention of those old familiar favourites, the *neem*, the tamarind (or *imli*), the *dhak* and the *champa*—not forgetting the powerful spirits who are believed to dwell in them!

During the rains, when *neem*-pods fall and are crushed underfoot, they give out a strong, refreshing aroma that lingers in the air for days. This is because the *neem* gives out more oxygen than most trees. When the sages of old declared that the *neem* was a great purifier of the air, and that its leaves, bark and sap had medicinal qualities, they were quite right, for the tree is still valued in medicine today.

From the earliest times it was associated with the gods who protect us from disease. Some regarded the tree as sacred to Sitala, the goddess of small-pox. When children fell ill, a branch of the *neem* was waved over them. The tree is said to have sprung from the nectar of the gods, and people still chew the leaves to purify themselves, both in the physical and spiritual sense.

The tree is also connected with the sun, as in the story of Neembark, 'The Sun in the Neem Tree'.



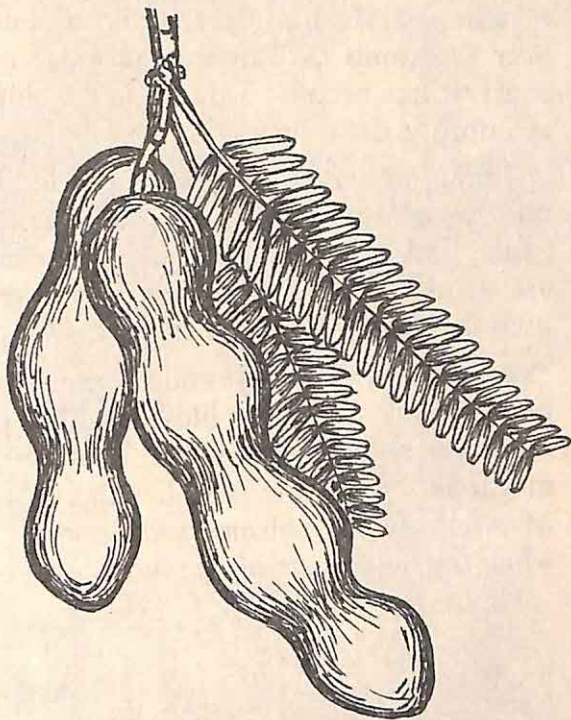
The Sun-God invited to dinner a *bairagi* whose vows prevented him from eating except by daylight. Dinner was late, and as darkness fell, the *bairagi* feared he would have to go hungry, but Surajnarayan, the Sun-God, descended from the *neem* tree and continued to shine till dinner was over.

To early man, trees were objects of awe and wonder. The mystery of their growth, the movement of their leaves and branches, the way they seemed to die and come again to life in spring, the sudden growth of the plant from the seed—all these appeared to be miracles as indeed they still are, miracles of nature!

Because of the tree's miraculous way of growing, people began to believe that it was occupied by spirits or a god, and devotion to the tree was devotion to the tree-god or the spirit that occupi-



ed it. Before a man cut down a tree, he had to beg its pardon for the injury he was about to do to it, and he would not even shake a tree at night because the tree-spirit was asleep then and might be disturbed. When a tree was felled, the woodcutter would pour some *ghee* on the stump, saying: "Grow thou out of this, O Lord of the Forest, grow into a hundred shoots! May you grow with a thousand shoots!"



There was a forest in Berar which was dedicated to a neighbouring temple, and no one dared buy or cut the trees there. The sacred groves near Mathura, where Lord Krishna played as a boy, were also protected for centuries. Today, even the sacred groves are disappearing, giving way to more and more houses for people. This is sad, because every human needs a tree of his own, if not to worship, at least to love.

The tamarind has for long been a favourite with both

Hindus and Muslims. In Gwalior a famous tamarind stands over the tomb of Tansen, the great musician at Akbar's court. It has become a tradition for singers to eat its leaves to improve their voices.

Tamarind leaves are used in curries, and the fruit is used both as a food and a medicine. The seeds too have their value, and they are put to use in an interesting way: they are ground into a paste, which makes a strong cement used in binding books.

Another beautiful wayside tree is the *champa*, or magnolia, with its wax-like blossoms that pour out their fragrance on summer evenings. There are several kinds of magnolia; some are small, others are tall and stately. Magnolia wood polishes well, and is used for furniture, while the flowers are often used in religious ceremonies.







Near the tomb of a famous saint at Ahmedabad there used to be a large old *champa* tree—perhaps it is still there—the branches of which were hung with glass bangles. Those anxious to have children came and offered bangles to the saint—the number of bangles depending on how many the supplicant could afford. If the saint favoured the wish, the *champa* tree “snatched up the bangles and wore them on its arms”.





Another spectacular tree is the *dhak*, or *palas*, which has given the battlefield of Plassey its name. It has the habit of dropping its leaves when it flowers, the upper and outer branches standing out in sprays of bright orange. The flowers are sometimes used to dye the powder used at *Holi* and the wood, said to contain the seed of fire, is often used in lighting ceremonial fires.

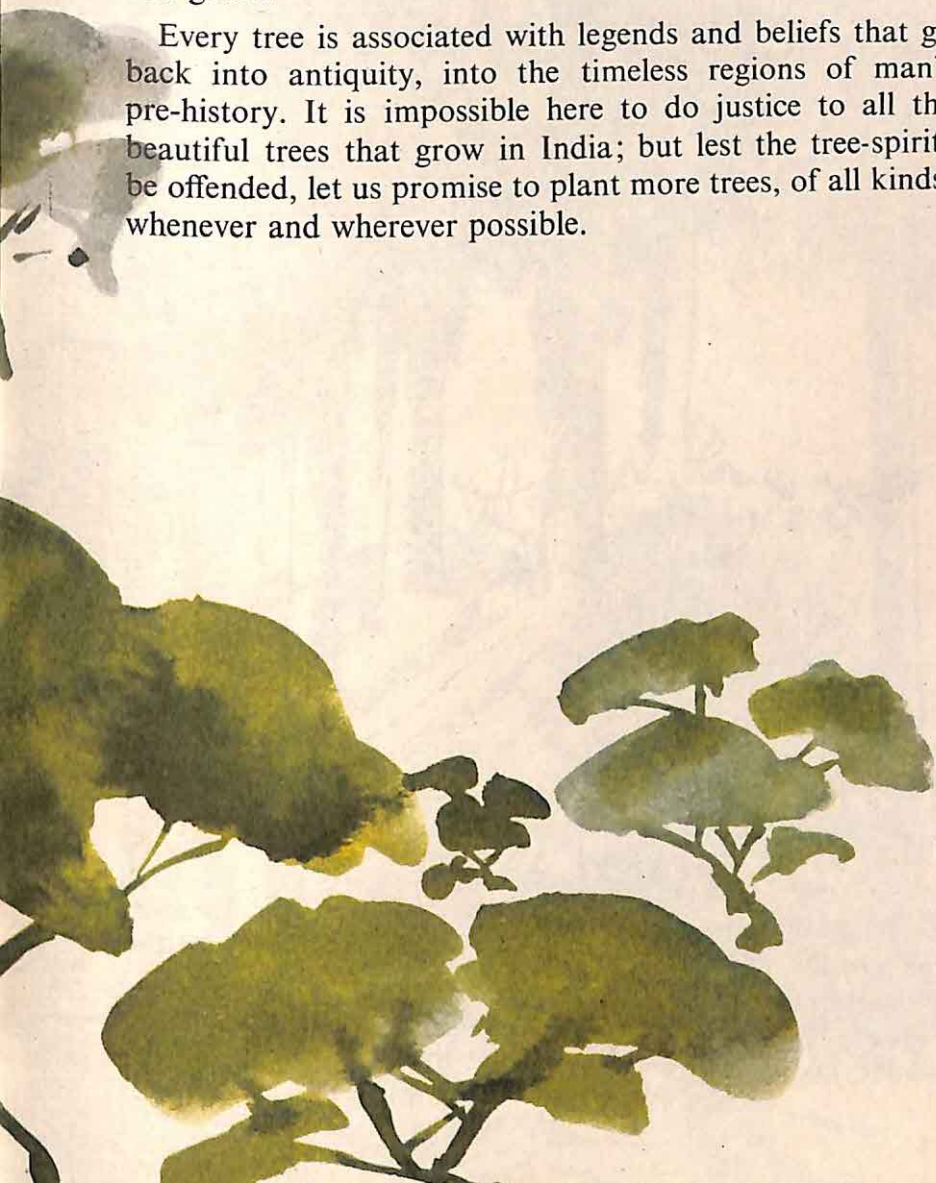
The *babul*, or *keekar* tree, is not very impressive to look at, but it is valuable for its bark and wood, and it will grow almost anywhere,

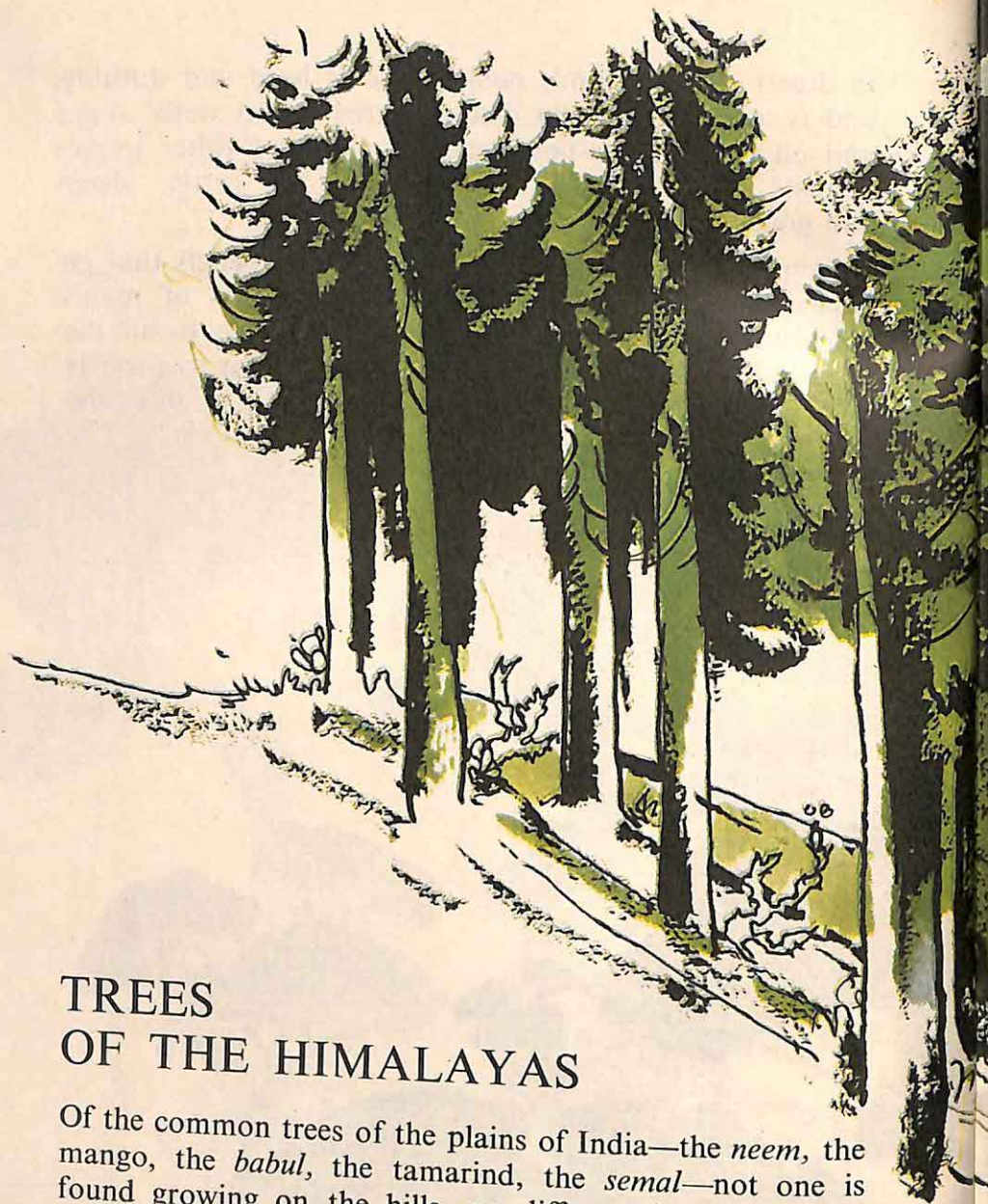




in desert or marshland. *Babul* wood is hard and durable, and is used for making wheels, curbs round wells, sugar and oil presses, rice-pounders, ploughs and other implements. The pod is a favourite food for cattle, sheep and goats.

Every tree is associated with legends and beliefs that go back into antiquity, into the timeless regions of man's pre-history. It is impossible here to do justice to all the beautiful trees that grow in India; but lest the tree-spirits be offended, let us promise to plant more trees, of all kinds, whenever and wherever possible.

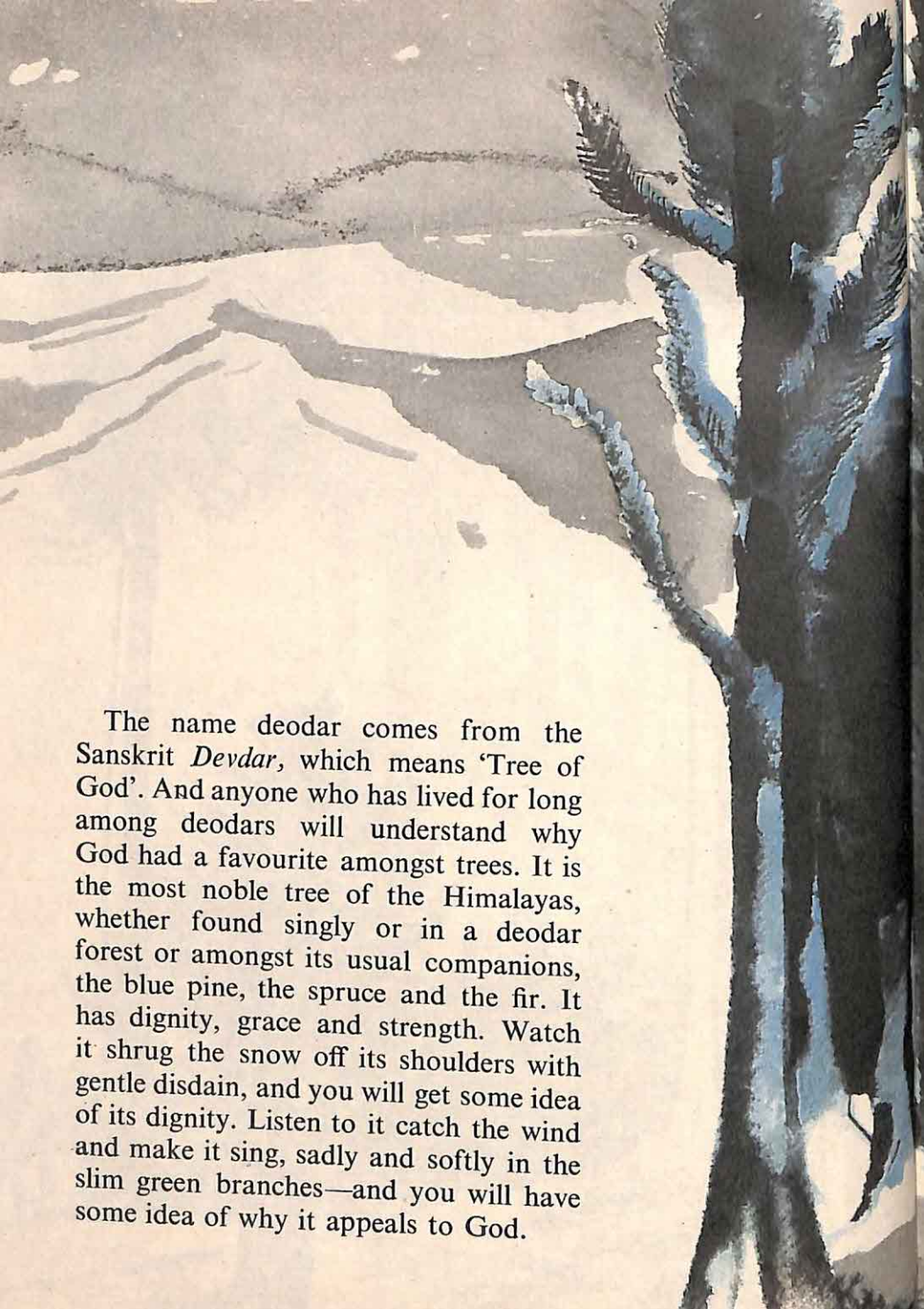




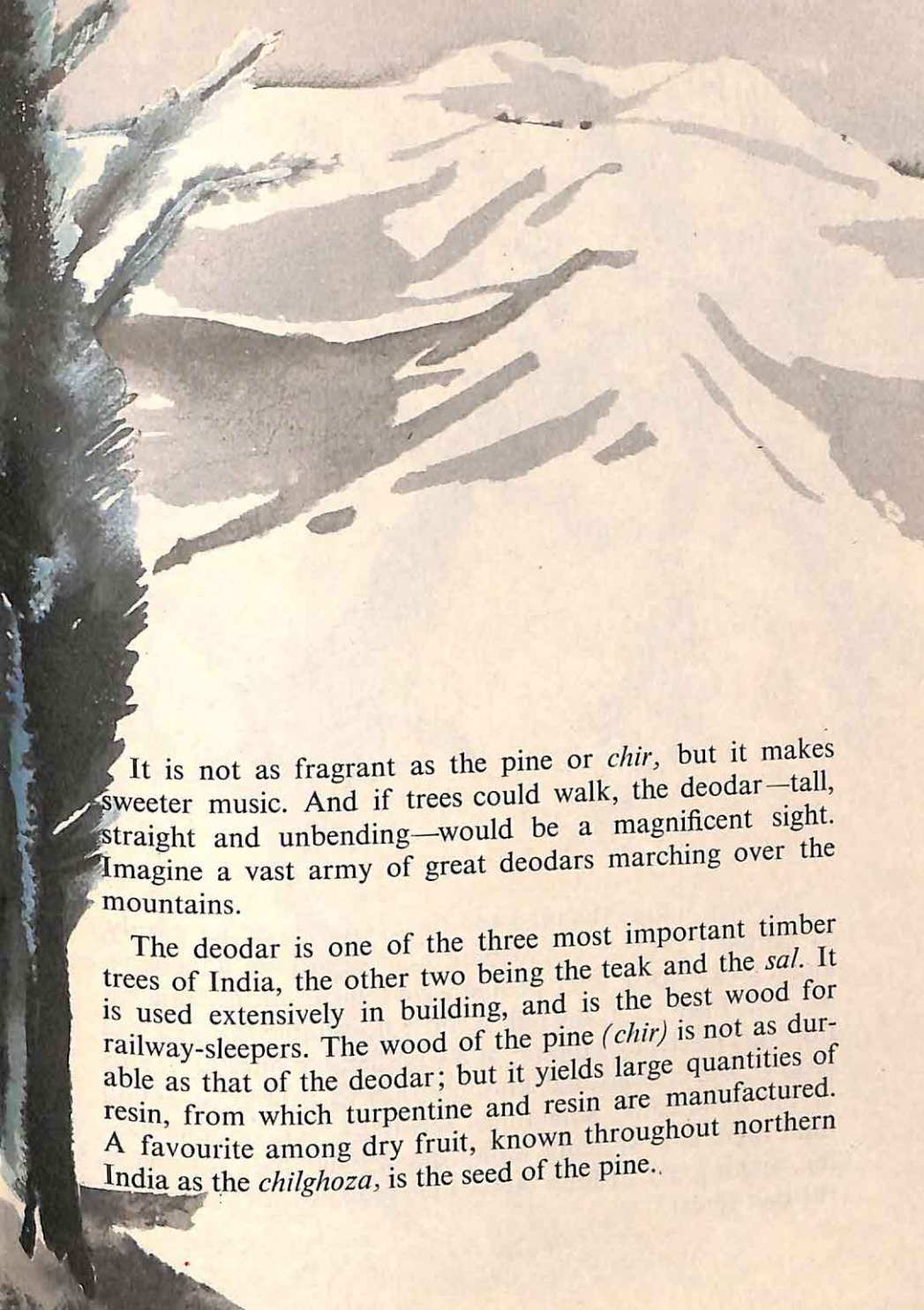
TREES OF THE HIMALAYAS

Of the common trees of the plains of India—the *neem*, the mango, the *babul*, the tamarind, the *semal*—not one is found growing on the hills, so different is the climate. Instead we have (above 6,000 feet) the rhododendron, the deodar, the evergreen oak and the beautiful horse-chestnut.



The background of the page is a watercolor illustration. It depicts a vast, snow-covered mountain range under a pale, hazy sky. In the foreground on the right side, a large, dark evergreen tree, possibly a deodar or blue pine, stands prominently. Its branches are dark and textured, contrasting with the white snow. The overall mood is serene and majestic.

The name deodar comes from the Sanskrit *Devdar*, which means 'Tree of God'. And anyone who has lived for long among deodars will understand why God had a favourite amongst trees. It is the most noble tree of the Himalayas, whether found singly or in a deodar forest or amongst its usual companions, the blue pine, the spruce and the fir. It has dignity, grace and strength. Watch it shrug the snow off its shoulders with gentle disdain, and you will get some idea of its dignity. Listen to it catch the wind and make it sing, sadly and softly in the slim green branches—and you will have some idea of why it appeals to God.



It is not as fragrant as the pine or *chir*, but it makes sweeter music. And if trees could walk, the deodar—tall, straight and unbending—would be a magnificent sight. Imagine a vast army of great deodars marching over the mountains.

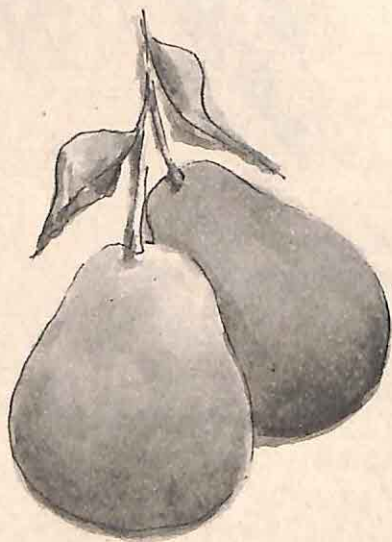
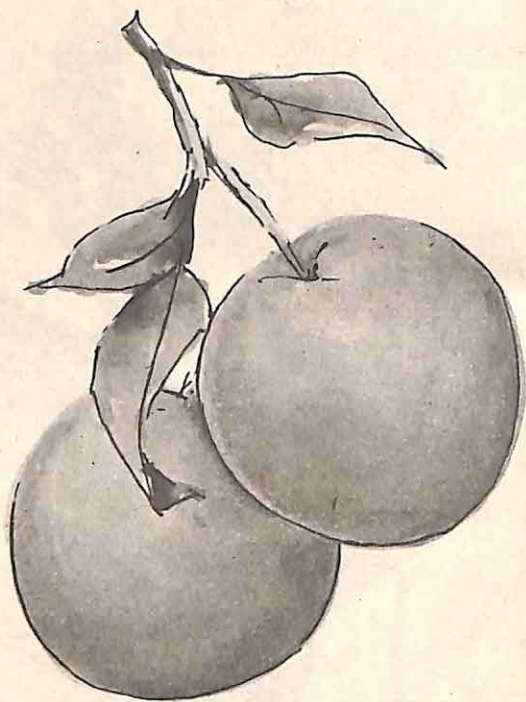
The deodar is one of the three most important timber trees of India, the other two being the teak and the *sal*. It is used extensively in building, and is the best wood for railway-sleepers. The wood of the pine (*chir*) is not as durable as that of the deodar; but it yields large quantities of resin, from which turpentine and resin are manufactured. A favourite among dry fruit, known throughout northern India as the *chilghoza*, is the seed of the pine.



The oak, unlike the pine and the deodar, is rather untidy, its crooked branches spreading out in various directions; and it looks worse after people have lopped off its branches for fuel. Even then, the oak is most hospitable to birds and insects. The steady tapping of a woodpecker hunting for its food in the creased and knobbly bark is a familiar sound in the mountains. Sometimes the trees seem uninhabited until there is a whirring sound like a helicopter approaching, and a party of long-tailed blue magpies streams across the oak forest.

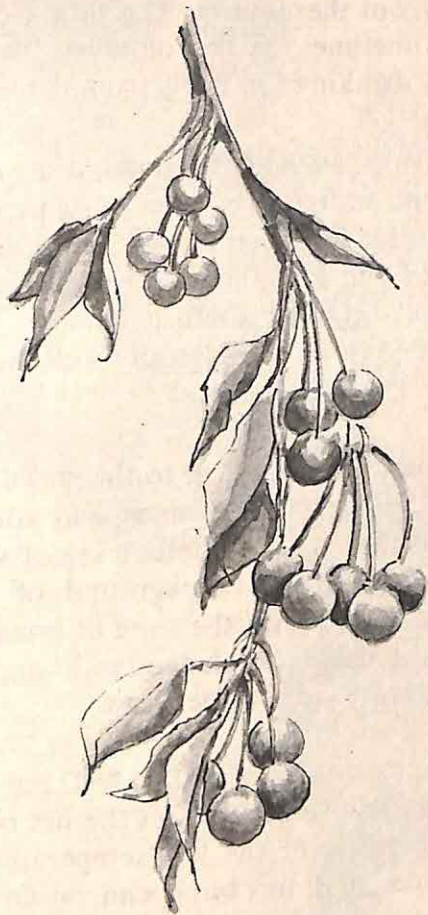


There are birds in the trees throughout the year—in February, flocks of spring-green parrots, white-cheeked bulbuls, and sometimes the paradise flycatcher; and at all times of the year there is the whistling thrush, often heard but seldom seen, its song sweet and pure but somehow incomplete, as though, towards the end, it



had forgotten the tune. And there is the green barbet, which sits right on top of the tallest spruce or deodar, and keeps up an endless chanting. The hillmen have a legend that the barbet is the reincarnation of the soul of a money-lender who died of

grief when he lost a lawsuit, and whose complaint continually rises to heaven: *Un-nee-ow, un-nee-ow*,—‘Injustice, injustice!’



During the rains the trunks of the oaks and rhododendrons are festooned with hanging moss and ferns. But in March the Himalayan forests are ablaze with the red flowers of the rhododendron. Although in Europe the rhododendron is only a shrub, in the Himalayas it is a large tree. During the flowering season, the forest floor is strewn with fallen petals. The hill people make a very tasty *chutney* from the flowers. The flower-cups are full of nectar, and sometimes parties of noisy black bulbuls get quite drunk by drinking too freely from them.

Temperate fruits, such as the apple, pear, apricot, peach, plum, cherry and walnut grow well in sheltered valleys. The walnut, a beautiful tree even when bare, is, like the deodar, a true native of the Himalayas. The cultivated apple was introduced from England about a hundred and fifty years ago. It has settled down wonderfully well, and now apples are grown in many hill districts.

The apple trees are asleep up to the end of March. Then one of nature's miracles takes place, and you wake up one morning to find the trees in bloom, a sea of white blossoms spreading out against the background of the mountain ranges. The air throbs with the song of honey-bees. By the end of June the trees are laden with apples, ruby-red, orange, green, and shades in-between.

Higher up, at elevations of 10,000 feet, the silver fir is the commonest tree. Above 12,000 feet the firs become stunted and dwarfed, because of the low temperatures; now only the hardy juniper and the birch can be seen. Soon even these disappear, and only a few wild flowers can be found growing between the rocks. We have reached the end of the tree-line, arrived at the beginning of the eternal snow-



line. Nothing grows here, nor needs to grow, for we have reached the roof of the world, the very abode of the gods.



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